Abstract

The present invention provides an osteoporosis diagnosis aiding apparatus that utilizes a panoramic radiograph. A digitalized image of the panoramic radiograph enters a personal computer (S210). The cortical bone at the lower edge of the mandibular molar in the panoramic radiograph is specified with a mouse to make that part a target of examination (S220). This extracted image is subjected to the following image processing. (1) Subject the image to median filtering so as to reduce noises throughout that image. (2) Find a skeleton constituted by micro-structural elements (S230). (3) Extract only components parallel to the tilt of the lower edge of the mandible (S240). (4) Binarize the image using Otsu's linear discrimination method, for example (S250). The binarized lines are then classified into three groups according to size, and can be determined as a risk of osteoporosis in a case where there is more than just a single line classified in the largest line group aside from the smallest line group.